

REPLACED BY

ART 34 AMDT

We claim:

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1. A process for preparing odorant polymers or plastics, in which a comminuted or fine-particle first polymer material is mixed with a desired odorant, allowed to swell for a predetermined period, and then further processed under a predetermined pressure and at a predetermined temperature.
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2. A process as claimed in claim 1, wherein, after the first polymer material has been allowed to swell with the odorant, it is mixed with a second plastic.
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3. A process as claimed in claim 2, wherein the first polymer material and the second plastic are identical or differ from one another.
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4. A process as claimed in claim 2 or 3, wherein the first polymer material differs from the second plastic and is selected from particulate crosslinked plastics or from thermoplastic elastomers with a glass transition temperature T_g below the glass transition temperature of the second plastic.
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5. A process as claimed in claim 4, wherein the first polymer material has a glass transition temperature of $\leq 0^{\circ}\text{C}$.
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6. A process as claimed in any of claims 1 to 5, wherein the odorant used comprises an odorant oil.
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7. A process as claimed in any of claims 1 to 6, wherein the odorant used comprises pheromones and/or ecomones.
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8. A process as claimed in any of claims 1 to 7, wherein the first plastic is mixed and allowed to swell with the odorant in a closed container.
9. A process as claimed in any of claims 1 to 8, wherein the first polymer material in the form of a powder is mixed with the odorant, allowed to swell, and then further processed with the second plastic in ground, powder or pellet form under high pressure and at about room temperature, and with heating to a temperature which is below the glass transition temperature of the second

plastic, or with heating to a temperature which is above the glass transition temperature either of the first polymer material or of the second plastic.

10. A process as claimed in any of claims 1 to 9, wherein the first polymer material used comprises thermoplastics, thermoplastic elastomers, graft rubber, polymers based on renewable raw materials, or polymers or else polymer mixtures based on starch.

15. 11. A process as claimed in claim 10, wherein the first polymer material and the second plastic are selected from polylactic acid, polyurethanes, polyamides, polyesters, polyesteramides, and polybutylene terephthalates, or from polymers, copolymers, block copolymers, triblock copolymers, or graft copolymers of styrene, butadiene, acrylonitrile, (meth)acrylate, or acrylic esters, and also mixtures of these with polycarbonates.

20. 12. An odorant polymer or an odorant plastic obtained by the process as claimed in any of claims 1 to 11.

25. 13. An odorant polymer or odorant plastic as claimed in claim 12 in pellet form.

30. 14. The use of the odorant polymer or plastic as claimed in claim 12 or 13 for defense against animals.

35. 15. A molding composition which comprises an odorant polymer or odorant plastic as claimed in claim 12 or 13.

16. The use of the molding composition as claimed in claim 15 or of the odorant polymer or plastic as claimed in claim 12 or 13 for altering and/or improving the odor properties of articles.

17. An article which comprises an odorant polymer or an odorant plastic as claimed in claim 12 or 13 and/or a molding composition as claimed in claim 15.

18. An article as claimed in claim 17 in the form of a plastic molding or a semifinished product.

19. The use of the article as claimed in claim 17 or 18 for improving room air quality.
20. The use of the article as claimed in claim 17 or 18 for defense against pests.

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